

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MOBILE MOTHERBOARD INC.,

Plaintiff,

v.

AIOEXPC, ALADAWN and AKLWY,

Defendants.

No. 24 CV 8703

Judge Manish S. Shah

MEMORANDUM OPINION AND ORDER

Plaintiff Mobile Motherboard holds a patent for a computer system made up of a computer box and an external, handholdable motherboard with a central processor that, when connected, create a complete computer system. It sues defendants AIOEXPC, ALADAWN, and AKLWY for patent infringement. Defendants move for judgment on the pleadings. For the reasons discussed below, the motion is granted.

I. Legal Standards

Federal Rule of Civil Procedure 12(c) states that “[a]fter the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings” to “dispose of the case on the basis of the underlying substantive merits.” Fed. R. Civ. P. 12(c); *Wolf v. Riverport Ins. Co.*, 132 F.4th 515, 518 (7th Cir. 2025) (internal quotation omitted); *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1367 (Fed. Cir. 2017) (applying regional circuit standard of review for judgment on the pleadings). To survive a Rule 12(c) motion to challenge the sufficiency of the complaint, the complaint must meet the Rule 12(b)(6) motion to

dismiss standard. *Wolf*, 132 F.4th at 518–19. The factual allegations in the complaint, accepted as true, must “raise a right to relief above the speculative level.” *Id.* at 519 (quoting *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 555 (2007)). A “plausible claim must do more than merely allege entitlement to relief; it must support the grounds for that entitlement with sufficient factual content.” *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1352 (Fed. Cir. 2021). At this stage, I accept all factual allegations in the complaint as true and draw all reasonable inferences in the plaintiff’s favor. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009).

III. Facts

Plaintiff Mobile Motherboard Inc. holds the right, title, and interest in Reissued Patent No. RE48,365. [29] ¶ 6–7.¹ The patent is for a computer system made up of a computer box with internal circuitry and communication ports and a separate, portable, and handholdable motherboard that connects externally to the computer box and enables the computer box to perform computing operations, or, if the computer box is one with a processor, to add to the computing power of the computer box’s processor. [29-4] at 2, 17, 19.

Defendants AIOEXPC, ALADAWN, and AKLWY are Chinese companies who make and sell products, including a handheld computer stick. [29] ¶ 9. Mobile Motherboard alleges that defendants’ handheld computer sticks infringe its patent. [29] ¶ 10.

¹ Bracketed numbers refer to entries on the district court docket. Referenced page numbers are taken from the CM/ECF header placed on the top of filings. The facts are taken from the plaintiff’s amended complaint, [29], and copy of the ’365 patent [29-4].

IV. Analysis

A. Claim chart

Each claim of the '365 patent requires (1) a computer box made up of a housing, internal circuitry, bus internal to the housing, and communication port; and (2) a “portable and handholdable motherboard *external* to the housing.” [29-4] at 19 (emphasis added). While the patent claims have additional requirements, these limitations are the ones relevant to the arguments presented by the parties.

In their briefs, the parties raise claim construction issues. I must either resolve the dispute to the extent that is needed to conduct my analysis or adopt the non-moving party’s construction of the claims. *MyMail, Ltd. v. ooVoo, LLC*, 934 F.3d 1373, 1379 (Fed. Cir. 2019). Here, I accept all the claim terms as alleged by Mobile Motherboard. The term that is dispositive here, “external,” does not need construction. The claim limitations require a motherboard *external* to a computer box.

“While a plaintiff need not prove infringement at the pleading stage,” a complaint may “contain[] too much rather than too little, to the point that [a plaintiff can] essentially plead[] itself out of court.” *Bot M8*, 4 F.4th at 1354. Where the pleadings allege facts that are inconsistent with the plaintiff’s infringement theory, the complaint may not allege a plausible claim. *Id.* at 1353–54.

Mobile Motherboard’s complaint alleges that defendants “use, offer for sale, sell, and/or import into the United States for subsequent resale or use Infringing Products that infringe directly and/or indirectly the claimed invention in the Patent. Infringement by the Infringing Products is demonstrated by the claim chart in Exhibit 3 for claim 1 and Exhibit 4 for claims 3, 7, 11, 13, 17, 21, 22, and 23 of the

Patent.” [29] ¶ 21. In the left column of each claim chart is a claim limitation and in the right column are photos of the defendants’ products with annotations showing how Mobile Motherboard alleges the product fulfills the corresponding limitation.

Mobile Motherboard initially alleges that a “monitor” fulfills the “computer box without a processor for performing computing operations” limitation of Claim 1. [29-5] at 3–4, 61–63; 90. For the limitations of the claimed computer box, though, Mobile Motherboard instead points to photos of the defendants’ computer sticks and their internal circuitry. For the “housing” limitation of the claimed computer box, Mobile Motherboard shows a photo of defendants’ computer stick. [29-5] at 7–10, 65, 92. The evidence for the “internal circuitry enclosed by the housing” limitation consists of the product listing’s photos of the computer stick and description of internal components of the computer stick—not circuitry of a monitor. [29-5] at 10–17, 65–69, 93–95. The “bus internal to the housing connected to the circuitry” limitation evidence includes the body of the computer stick, and additional details from the product listing, again related to the stick, not an external monitor. [29-5] at 17–23, 69–72, 96–97. Finally, the evidence for the “first communication port” limitation refers to “Connections A, B in the monitor” and the Bluetooth capabilities, USB ports, and HDMI cables in the computer sticks. [29-5] at 23–29, 73–75, 98–99. *See also* [29-6] at 10–11, 15–16, 18, 27–28, 33–34, 36, 43–45 (claim chart for Claims 3, 7, 11, 13, 17, 21, 22, and 23, referring to the Claim 1 chart for the shared limitations above).

Importantly, Mobile Motherboard’s claim chart also uses the computer stick as evidence of the “portable and handholdable motherboard external to the housing.” [29-5] at 29–59, 75–89, 100–14; [29-6] at 10–11, 16–18, 23–28, 34–36, 44–45.

Mobile Motherboard’s claim charts “reveal an inconsistency that is fatal to its infringement case.” *Bot M8*, 4 F.4th at 1354. Mobile Motherboard argues that the defendants infringe the patent when their products are plugged into a monitor. But there is no allegation in the complaint that defendants’ devices practice the patent with a monitor as the claimed computer box. Instead, the claim chart alleges that the defendants’ computer sticks are the computer box by alleging that they fulfill the claim limitations for a computer box—housing, internal circuitry, bus inside the housing connected to the circuitry, and first communication port that enables connections between external electrical circuitry to the internal bus. [29-4] at 19. Mobile Motherboard also alleges that the computer sticks fulfill the claim limitations for the patent’s claimed motherboard. As alleged, the defendants’ products fail to fulfill the “external” motherboard limitation—the claim chart shows defendants’ motherboard *internal* to the computer-stick housing, creating a complete computer system.

Mobile Motherboard’s patent is for at least a two-piece computer system: a computer box without a processor (or one with a first central processor), and an external motherboard with a central processor, that, when connected, creates a complete computer system. [29-4] at 19; [49] at 13. The patent itself makes clear that the computer system contains two parts, and that the motherboard is separate from

the computer box. The patent disclaims that it created a single unified computing system: “[a] conventional computer device is provided with its own motherboard. Each motherboard sits inside a computer box. ... The present invention overcomes [the problems with an integrated motherboard] by providing a motherboard that is portably configured to serve more than one computer device.” [29-4] at 17. The patent shows that the motherboard is separate from the computer device, and that the motherboard itself is not a complete computer system.

This is supported by the prosecution history. *See Sequoia Tech., LLC v. Dell, Inc.*, 66 F.4th 1317, 1327 (Fed. Cir. 2023) (prosecution history “can inform how the inventor understood the invention and whether the inventor limited the invention during prosecution, thereby clarifying the scope of a claim.”). In prosecuting the claim, Mobile Motherboard repeatedly differentiated between computers and motherboards—for example, Mobile Motherboard distinguished the prior art of Spalding as a “complete computer system—not just a motherboard.” [38-4] at 22. Mobile Motherboard argued that a computer system “need only be connected to a keyboard and display ... to interact with a user, and to perform all of the ‘normal’ functions of a personal computer. ... By contrast, the Claims recite a ‘motherboard’, rather than a portable computer system. As would have been clearly understood by one of ordinary skill in the art, a motherboard is not a complete computer system.” [38-4] at 22. Mobile Motherboard specifically noted that “[m]otherboards at the time of invention (and even now) require more than just connection to a keyboard and display to interact with a user in the manner of a regular PC.” [38-4] at 22.

So, in order for the complaint to allege infringement, Mobile Motherboard needed to allege a motherboard, external to a computer box, connected to a computer box with the specified claim limitations. Instead, Mobile Motherboard's claim charts show that defendants' products are the claimed computer box—with a housing, internal circuitry, internal bus, and first communication port—and that the defendants' products are the claimed motherboard. As alleged, defendants' products contain a motherboard *internal* to the computer box—inconsistent with the claim language that the motherboard is *external* to the computer box.

Although there are references to an external computer monitor in the complaint and its attachments, the allegations of infringement depend on plaintiff's claim chart. [29] ¶ 21. That chart alleges that defendants' computer sticks are a full system—comprised of a computer box with all the claimed limitations and a motherboard with all the claimed limitations, in one housing. This inconsistency in the pleading defeats Mobile Motherboard's infringement claim—Mobile Motherboard's infringement claims are not plausible in the face of its own pleading. *See Bot M8*, 4 F.4th at 1354 (dismissing count because while the patent claim required two programs to be stored together separate from the motherboard, the complaint alleged that one program was located *on* the motherboard itself, revealing a “fatal” inconsistency).

B. Northbridge and southbridge

Defendants once again argue that the patent requires two separate northbridge and southbridge chipsets. Nothing in the patent requires two separate

chipsets, and neither does the prosecution history require separate components for the northbridge and southbridge. *See* [42] at 7.

C. Enabling the computer box to perform computing operations

Plaintiffs argue that I previously construed the claim “enable the computer box to perform computing operations” incorrectly, because the claimed computer box does not have a processor so the “computing operations” cannot be performed “inside” the computer box. [49] at 24–27. The claim language states that the connection of the motherboard to the computer box “enables said computer box to perform computing operations.” [29-4] at 19. In the context of the motion for a preliminary injunction, I read the patent to require a connection of the motherboard to the computer box to enable the computer box to perform computing operations, rather than the computer stick performing all the operations and displaying the operations through a monitor. That did not require computing “inside” the computer box housing, but was a straightforward reading of the plain language of the patent and by Mobile Motherboard’s own explanation in the patent’s prosecution history. [38-4] at 22 (“Motherboards at the time of invention (and even now) require more than just connection to a keyboard and display to interact with a user in the manner of a regular PC.”). In any case, I noted that a *Markman* hearing would be necessary to definitively construe the limitation. [42] at 6. Because the complaint fails to allege a motherboard external to a computer box, I need not construe this limitation now.

D. Enabling the second central processor to add to the central processing functions of the first central processor in the computer box.

Mobile Motherboard also argues that I improperly read a preferred embodiment into the patent's claim by stating that "add to the central processing functions" means "to boost the processing functions of the computer box's processor." [49] at 27. This is a misreading of the preliminary injunction order, which did not limit Claim 11 to "boosting" in the way that plaintiff suggests. I did not need to construe the claim, because Mobile Motherboard failed to put forward any evidence that the defendants' products fulfilled the claim limitation for Claim 11. Mobile Motherboard had the burden to show it was likely to succeed on the merits. *BlephEx, LLC v. Myco Indus.*, 24 F.4th 1391, 1398 (Fed. Cir. 2022). It put forward no evidence at all regarding the merits of infringement of Claim 11, so no matter the definition of "boost" or "add to," it could not have met its burden to show likelihood of success on the merits of infringement of Claim 11. To the extent that the claim term needed to be construed, a *Markman* hearing would have been necessary. But because the complaint fails to allege a plausible claim of infringement, there is no need to construe the claim.

IV. Conclusion

Defendants' motion for judgment on the pleadings, [38], is granted. Enter judgment in favor of defendants and terminate civil case.

ENTER:



Manish S. Shah
United States District Judge

Date: September 4, 2025